

ABSTRACT OF THE DISCLOSURE

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A $\Delta\Sigma$ modulator modulates only an error component separated by a component separating portion. Therefore, even if the number of order of the $\Delta\Sigma$ modulator increases, an amplitude of an output of an integrator in the final stage does not excessively increase, and the stability of the modulator can be achieved. Since the signal component separated by the component separating portion does not pass through the $\Delta\Sigma$ modulator, an intensity of an input signal can be maintained as it is, and the modulator can have high precision.